DECISION RECORD

Environmental Assessment No. NM-060-00-070 Section 15 Grazing Authorization Allotment 65006

It is my decision to issue a ten-year lease to Ms. Louise Van Eaton to graze cattle on Allotment 65006 based on the Proposed Action in Environmental Assessment NM-060-00-070. Permitted use will be for four animal units yearlong at 100 percent federal range, which corresponds to 48 animal unit months (AUMs). Permitted use will consist of 24 AUMs each of active and suspended use.

In accordance with 43 CFR §4160, a period of 15 days is allowed after the receipt of this proposed decision to protest it to the Authorized Officer in person or in writing. Points of protest should be specific. In the absence of a protest, this proposed decision will become the final decision of the Authorized Officer without further notice.

In accordance with 43 CFR §4.470, a period of 30 days is allowed following the date of the final decision to file an appeal and petition for a stay of the decision for the purpose of a hearing before an Administrative Law Judge. The specific points being appealed should be clearly and concisely stated. Appeals can be filed at the following address:

Field Office Manager Bureau of Land Management Roswell Field Office 2909 West Second Street Roswell, New Mexico 88201

signed by T. R. Kreager 6/26/01
Assistant Field Office Manager - Resources Date

ENVIRONMENTAL ASSESSMENT for Section 15 GRAZING AUTHORIZATION on ALLOTMENT 65006

Township 5 South, Range 26 East Sections 23-26 (all or part)

EA-NM-060-00-070

March 2000

U.S. Department of the Interior Bureau of Land Management Roswell Field Office Roswell, New Mexico

I.BACKGROUND

A. Introduction

When authorizing livestock grazing on public range, the Bureau of Land Management (BLM) has historically relied on a land use plan and environmental impact statement to comply with the National Environmental Policy Act (NEPA). A recent decision by the Interior Board of Land Appeals, however, affirmed that the BLM must conduct a site-specific NEPA analysis before issuing a permit or lease to authorize livestock grazing. This environmental assessment fulfills the NEPA requirement by providing the necessary site-specific analysis of the effects of issuing a new grazing lease on Allotment 65006.

B. Purpose And Need For The Proposed Action

The purpose of issuing a new grazing lease would be to authorize livestock grazing on public range on Allotment 65006. The lease would be needed to specify the types and levels of use authorized, and the terms and conditions of the authorization pursuant to 43 CFR §§4130.3, 4130.3-1, and 4130.3-2.

C. Conformance With Land Use Planning

The proposed action conforms with the Roswell Approved Resource Management Plan (RMP) and Record of Decision (BLM 1997) as required by 43 CFR 1610.5-3.

D. Relationships to Statutes, Regulations, or Other Plans

The proposed action and alternatives are consistent with the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1700 et seq.); the Taylor Grazing Act of 1934 (43 U.S.C. 315 et seq.), as amended; the Clean Water Act (33 U.S.C. 1251 et seq.), as amended; the Endangered Species Act (16 U.S.C. 1535 et seq.), as amended; the Public Rangelands Improvement Act of 1978 (43 U.S.C. 1901 et seq.); Executive Order 13112, Invasive Weeds; Executive Order 11988, Floodplain Management; and Executive Order 11990, Protection of Wetlands.

II. PROPOSED ACTION AND ALTERNATIVES

A. Proposed Action - Current Livestock Management

The proposed action is to issue Ms. Louise Van Eaton a ten-year lease to graze cattle on Allotment65006. Permitted use on this Section 15 allotment would be for four animal units (AUs), year-long at 100 percent federal range, which corresponds to 48 animal unit months

(AUMs).1 Of the total permitted use, 24 AUMs each would be approved as active and suspended use. The BLM does not control overall livestock numbers on the allotment. The BLM to bills the lessee for the amount of forage used on public range within the allotment.

Under the Proposed Action, management of the allotment would continue under the terms and conditions of the current lease. No changes to livestock management or to existing range improvements would be required.

B. No Grazing Lease Alternative

Under this alternative a new grazing lease would not be issued for Allotment 65006. No grazing would be authorized on federal land on this allotment.

III. AFFECTED ENVIRONMENT AND ENVIRONMENTAL IMPACTS

A. General Setting

Allotment 65006 is in Chaves County, 37 miles northeast of Roswell. The allotment lies on high terraces approximately five miles east of the Pecos River. Sixmile Draw, a tributary of the Pecos, flows through the north end of the allotment. Elevations range from 3888 feet at the downstream end of Sixmile Draw, to 4083 feet on a small hill in Section 25.

The climate is semi-arid with normal monthly temperatures ranging from 20*F in January to 950F in July at Bitter Lake National Wildlife Refuge (Owenby and Ezell 1992). Observed minimum and maximum temperatures were -220F and 1130F, respectively. Average annual precipitation is 11.6 inches, primarily as rainfall. Annual precipitation has ranged from 3.11 inches to 21.08 inches (Kunkel 1984).

B. Affected Resources

The following resources or values are not present or would not be affected by the authorization of livestock grazing on Allotment 65006: Areas of Critical Environmental Concern, Cultural Resources, Floodplains, Riparian/Wetland Areas, Native American Religious Concerns, Prime or Unique Farmland, Minority/Low Income Populations, Invasive Nonnative Species, Hazardous or Solid Wastes, Wild and Scenic Rivers, and Wilderness. Affected resources and the impacts resulting from livestock grazing are described below.

¹ For a cattle operation, an animal unit (AU) is defined as one cow with a nursing calf or its equivalent. An animal unit month (AUM) is the amount of forage needed to sustain that cow and calf for one month.

1. Livestock Management

Affected Environment

Ms. Van Eaton currently runs a Hereford-Angus herd and both breeds of bulls. Heifers are usually culled at 8 to 10 years of age. Permitted use on the allotment is for four AUs (48 AUMs), with 24 AUMs each as active and suspended use. Active use had been 48 AUMs until 1980 when it was adjusted to 11 AUMs to bring stocking rates in line with forage production on federal lands. Active use was adjusted again in 1990 to 24 AUMs based on the 1980-90 East Roswell Rangeland Monitoring Studies.

The allotment was placed in the "C" category (i.e., a "custodial" allotment) upon completion of the Roswell Resource Area Management Framework Plan Amend ment/Environ mental Impact Statement (BLM 1984). The BLM proposed no changes in management or authorized use.

Environmental Impacts

Under the Proposed Action, current livestock grazing management would continue on the allotment. Because grazing would be sustainable under current management, no impacts to the livestock operation would occur.

Under the No-Grazing Alternative, no livestock grazing would be authorized on BLMI lands. If livestock grazing were to continue on adjacent privately owned lands, the BILM land would have to be fenced apart to prevent trespass on public lands (43 CIFIR 4140.1(b)(1)). The expense of fencing would be borne by the private landowner.

Cumulative impacts of the grazing and no grazing alternatives were analyzed in Rangeland Reform '94 Draft Environmental Impact Statement (BLM and USDA Forest Service 1994) and in the Roswell Resource Area Draft RMPIEIS (BLM 1994). The no livestock grazing alternative was not selected in either document.

2. Vegetation

Affected Environment

Allotment 65006 is in the Grasslands community type. General objectives for the community are described in the Roswell Approved RMP and Record of Decision (BLM 1997), and the Roswell Draft RMP/EIS (BLM 1994). The allotment is in a Loamy SD-3 ecological site.

Ground cover species observed on the allotment include threeawn, mesa dropseed, tobosa, plains bristlegrass, and black, blue, sideoats, and hairy grama. Various perennial forbs are also present. Shrub species include sagebrush, feather dalea, and broom snakeweed, which can be heavy.

Environmental Impacts

Under the Proposed Action, vegetation would continue to be grazed and trampled by livestock, primarily those species preferred as forage. However, the current level of use which has been adjusted in the past, appears to be sustainable.

Under the No-Grazing Alternative, vegetation condition might improve somewhat. Grasses would increase initially, but plant vigor could decline from the lack of vegetation removal, making ground species rank.

3. Soils

Affected Environment

The Soil Survey of Chaves County, New Mexico, Northern Part (USDA Soil Conservation Service 1983) was used to describe and analyze the impacts to soils. Soil units found on the allotment include Faskin-Roswell complex, Blakeney-Ratliff association, and Ratliff/Redona association. These are all typical of soils found on high terraces above the Pecos River.

The soils are derived from calcareous alluvium and eolian deposits, and are generally deep and well-drained. The surface texture is typically fine sandy loam, though sandy clay loam is also present. The soils are highly susceptible to wind erosion, but slightly or moderately susceptible to water erosion.

Environmental Impacts

Under the Proposed Action, livestock would remove some of the cover of standing vegetation and litter, and compact the soil by trampling. If livestock management were inadequate, these effects could be severe enough to reduce infiltration rates and increase runoff, leading to greater water erosion and soil losses (Moore et al. 1979, Stoddart et al. 1975). Producing forage and protecting the soil from further erosion would then be more difficult. The impacts of removing vegetation and trampling would be greatest in areas of concentrated livestock use, such as trails, waters, feeders, and shade. Some sandy soils on the allotment are highly vulnerable to wind erosion. Removal of the vegetative cover also increases the exposure of soils to the erosive force of wind.

Though livestock impacts are possible, monitoring data indicate that the current level of grazing is

sustainable and should maintain an adequate vegetative cover to protect soils from erosion. Periodic rangeland monitoring would help ensure an adequate vegetative cover to protect soils from wind or water erosion by indicating when and where changes to livestock management are needed in the future.

Under the No-Grazing Alternative, any risk of overgrazing would be eliminated. However, removing grazing animals from an area where they were a natural part of the landscape could result in poor use of precipitation and inefficient mineral cycling (Savory 1988). Bare soil could be sealed by raindrop impact, and vegetation could become decadent, inhibiting new growth. Therefore, the results of no grazing could be similar to those of overgrazing in some respects.

4. Water Quality

Affected Environment

There are no perennial waters on the allotment, though Sixmile Draw is a major ephemeral drainage that reaches the Pecos River about five miles to the west. There is a dirt tank in Section 23, but no stock waters are located on public land.

Environmental Impacts

The No-Grazing Alternative might reduce sediment loading to Sixmile Draw slightly during stormflow. The reduction would not be significant compared to all sediment sources. No secondary impacts to resources such as fisheries would occur. No impacts to ground water would be expected.

5. Wildlife

Affected Environment

Allotment 65006 provides diverse habitat for more than 54 bird species, 33 mammal species, and 36 species of reptiles and amphibians. Raptors that are frequently associated with the vegetation types on the allotment include the red-tailed hawk, Swainson's hawk, ferruginous hawk, rough-legged hawk, common nighthawk, and the American kestrel.

Game bird species include scaled and bobwhite quail, and mourning dove. Other bird species that are commonly observed are the turkey vulture, road runner, Chihuahuan raven, great horned owl, burrowing owl,m northern flicker, loggerhead shrike, western meadowlark, western kingbird, pyrrhuloxia, horned lark, and other passerine birds.

A diversity of small mammals provide an excellent prey base for carnivores such as coyote, gray fox, bobcat, raccoon, badger, hooded skunk, and striped skunk. They prey species include black-tailed jack rabbit, desert cottontail, spotted ground squirrel, pocket mouse, deer mouse, northern grasshopper mouse, harvest mouse, kangaroo rat, and whitethroated woodrat. Two big game species that occur on the allotment are the pronghorn antelope and the mule deer.

Reptiles and amphibians that inhabit the area are the dune sagebrush lizard, southern prairie lizard, lesser earless lizard, side-blotched lizard, longnose leopard lizard, sixIined racerunner, tree lizard, skinks, western diamondback, western rattlesnake, coachwhip, spadefoot toad, western box turtle, and yellow mud turtle.

Environmental Impacts

Under the Proposed Action, wildlife would continue to compete with domestic livestock for space,

forage, and browse. With proper livestock management and stocking rates, there would be adequate cover and forage for most wildlife species, resulting in sustainable populations for those wildlife species that occupy or use the area.

6. Threatened and Endangered Species

Affected Environment

A list of federal threatened, endangered, and candidate species reviewed for this EA is found in Appendix 11 of the Roswell Approved RMP (BLM 1997). No known threatened or endangered species or designated critical habitat areas occur on Allotment 65006.

The mountain plover, however, has been recently proposed for listing as an endangered species. It is associated with shortgrass and shrub-steep landscapes throughout its breeding and wintering range. Historically, on the breeding range, it occurred on nearly denuded prairie dog towns and in areas of major bison concentration. The mountain plover is strongly associated with sites of heaviest grazing pressure to the point of excessive surface disturbance. Short vegetation, bare ground, and a flat topography are now recognized as habitat-defining characteristics at both breeding and wintering locales.

Mountain plover surveys were conducted in New Mexico by Lawry Sager in 1995, for the New Mexico Department of Game and Fish (Sager 1996). No breeding populations were found south of 340 north latitude, which generally follows the Chaves/DeBaca County line north of the allotment. No birds were reported in DeBaca or Chaves counties. Only one observation was reported in Lincoln County (near Lon). In addition, mountain plover surveys were conducted in 1998 at BLM selected sites by the New Mexico Natural Heritage Program (DeLay and Johnson 1998). No mountain plovers were observed at the sites.

Environmental Impacts

Because the mountain plover prefers short vegetation and actually seeks out grazed pastures, cumulative impacts from grazing are not anticipated to adversely affect the bird. Grazing practices which maintain or improve ground cover could possibly decrease mountain plover habitat. The Proposed Action would continue to emphasize proper watershed management, but is unlikely to adversely affect this species or its habitat in the mixed desert shrub area. Since no known wintering locales or breeding sites have been found, and no known prairie dog towns are located within the allotment, proper grazing management is not likely to jeopardize, destroy, or adversely modify the habitat. No change in the mountain plover habitat would result if the No-Grazing Alternative were selected.

7. Visual Resources Management

Affected Environment

The entire allotment is in a Class IV area for visual resources management. In a Class IV area, contrasts to the basic elements (e.g., form, line, color, or texture) caused by a management activity may attract aftention and be a dominant feature in the landscape in terms of scale. The changes, however, should repeat the basic elements of the landscape.

Environmental Impacts

The basic elements of the landscape would not change within the allotment under either management alternative. Potential impacts to visual resources would be analyzed and mitigated if new allotment

management activities are proposed in the future.

8. Recreation

Affected Environment

Recreation opportunities are limited on this grazing allotment because of the limited access to public lands. The public land within this allotment is remote and virtually surrounded by private lands. Public lands within this allotment are classified as "limited to existing roads and trails" for the use of off-highway vehicles.

Environmental Impacts

Authorizing grazing under the Proposed Action would have little or no affect to recreational opportunities on the allotment, since public access is limited.

9. Significant Caves and Karst

Affected Environment

Allotment 65006 is in an area of low potential for the occurrence of caves and karst. No caves or major karst features have been reported for the allotment, though a comprehensive inventory has not been completed.

Environmental Impacts

Because no caves or major karst features are known to exist on the allotment, impacts to these resources are not expected to be significant under either alternative. It is possible that cave or karst features exist on the allotment, but have not yet been discovered. If a feature is discovered in the future, protective measures could be required to mitigate adverse impacts to the feature.

10. Air Quality

Affected Environment

The allotment is in a Class 11 area for the Prevention of Significant Deterioration of air quality as defined by the federal Clean Air Act. Class 11 areas allow a moderate amount of air quality degradation.

Air quality in the region is generally good, with winds averaging 10 to 16 miles per hour depending on the season. Peak velocities reach more than 50 miles per hour in the spring. These conditions rapidly disperse air pollutants in the region.

Environmental Impacts

Dust levels resulting from allotment management activities would be slightly higher under the Proposed Action than the No-Grazing Alternative. The cumulative impact on air quality from the allotment would be negligible compared to all pollution sources in the region.

IV. CUMULATIVE IMPACTS

A cumulative impact is defined as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions

regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time" (40 CIFIR 1508.7).

The incremental impact of issuing a grazing lease on these resources must be analyzed in the context of impacts from other actions. Other BLM actions that could have impacts on the identified resources include: livestock authorization on other allotments; oil and gas activities; rights-of-way; and recreation use. All authorized activities which occur on BLM land can also take place on state and private lands.

Many of the actions which could contribute to cumulative impacts have occurred over many years. Impacts from open-range livestock grazing in the last century are still being addressed today, and oil and gas activities began in the early part of the 20th century. These activities and others are still occurring today, and are expected to continue into the foreseeable future to some degree.

The Proposed Action would not add incrementally to the cumulative impacts. The basis for this conclusion is the discussion of potential impacts in Section 111 of the EA.

V. MITIGATION MEASURES

Mitigation measures are actions which could be taken to avoid or reduce impacts likely to result from the Proposed Action or the No-Grazing Alternative. The following mitigation measures address possible impacts from livestock grazing under the Proposed Action.

Vegetation monitoring studies would occur periodically if a new grazing lease were issued. Changes to livestock management would be made if monitoring data show that adverse impacts to rangeland health is occurring.

It is possible that unforeseen impacts to other resources could occur during the term of the lease. If adverse environmental impacts are observed, action would be taken to mitigate those impacts at that time.

VI. RESIDUAL IMPACTS

Residual impacts are direct, indirect, or cumulative impacts thatwould remain afterapplying the mitigation measures. Residual impacts following authorization of livestock grazing would be insignificant if the mitigation measures are properly applied.

VII. FUNDAMENTALS OF RANGELAND HEALTH

Through the Rangeland Reform '94 initiative, the BLM developed new regulations for grazing administration on public lands. With public involvement, fundamentals of rangeland health were established and written into the new regulations. The fundamentals of rangeland health are identified in 43 CFR §4180.1, and pertain to (1) watershed function; (2) ecological processes; (3) waterquality; and (4) habitat forthreatened, endangered, and other special status species. Based on available data and professional judgement, the evaluation by this environmental assessment indicates that conditions identified in the

fundamentals of rangeland health exist on Allotment 65006.

VIII. BLM INTERDISCIPLINARY TEAM

Dan Baggao Pat Flanary Howard Parman Jerry Ballard Tim Kreager

Irene Salas

Jerry Dutchover Helen Miller

Jim Schroeder

IX. PERSONS OR AGENCIES CONSULTED

Ms. Louise Van Eaton - Lessee

Chaves County Public Land Use Advisory Committee

Forest Guardians

New Mexico Department of Game and Fish

New Mexico Energy, Minerals, and Natural Resources Department - Forestry and Resource Conservation Division

New Mexico Environment Department - Surface Water Quality Bureau

New Mexico State Land Office

U.S. Fish and Wildlife Service - Ecological Services U.S. Fish and Wildlife Service - Fishery Resources Office

X. LITERATURE CITED

- Bureau of Land Management. 1984. Roswell Resource Area management framework plan amend ment/environmental impact statement. BLM-NM-ES-84-024-4322. 84 pp.
- Bureau of Land Management. 1994. Roswell resource area draft resource management plan/environmental impact statement. BLM-NM-PT-94-0009-4410.
- Bureau of Land Management. 1997. Roswell approved resource management plan and record of decision. BLM-NM-PT-98-003-1610. 71 pp.
- Bureau of Land Management and USDA Forest Service. 1994. Rangeland reform '94, draft environmental impact statement.
- DeLay, L. and K. Johnson. 1998. Mountain plover survey on Bureau of Land Management lands, Roswell field Office, New Mexico, 1998. New Mex. Nat. Herit. Prog. 22 pp.
- Kunkel, K.E. 1984. Temperature and precipitation summaries for selected New Mexico locations. New Mex. Dept. Agric. 190 pp.
- Moore, E., E. Janes, F. Kinsinger, K. Pitney, and J. Sainsbury. 1979. Livestock grazing management and water quality protection state of the art reference document. EPA 910/9-79-67. Environmental Protection Agency. Seattle, WA. 147 pp.
- Owenby, J.R., and D.S. Ezell. 1992. Monthly station normals of temperature, precipitation, and heating and cooling degree days: 1961-1990. Climatography of the U.S. No. 81. U.S. Dept. Comm, Nafl. Climatic Data Center. Asheville, NC.
- Sager, L. 1996. A 1995 survey of mountain plover in New Mexico. NM Dept. Game & Fish. Contract 95-516-66. 59 pp.
- Savory, A. 1988. Holistic resource management. Island Press. Washington, DC. 564 pp.
- Stoddart, L.A., A.D. Smith, and T.W. Box. 1975. Range management. Third Ed. McGraw-Hill, Inc. New

York. 532 pp.

USDA Soil Conservation Service. 1983. Soil survey of Chaves County, New Mexico, northem part. 224 pp.